How to Read the Prime Number Card

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The cell corresponding to x79 has been highlighted in the 0 - 4 hundreds section of the card below:

Here is a close-up of the cell:



Each cell in the prime number card encodes up to 5 prime numbers. To read which prime numbers are encoded in the cell, we first read the hundreds place value from the light blue colored strip across the top. The dots in each cell represent the corresponding hundreds place value. For example, in the cell highlighted here, the top left dot corresponds to 0 hundreds; the top right dot corresponds to 100; the center dot corresponds to 200; etc. The tens place value is read from the row heading and the ones place value is read from the column heading.

In the cell shown, the tens place value is 7 and the ones place value is 9; hence the primes will be x79, where x is a hundreds place value. Since there is a dot in the upper left corner of the cell, one prime is 79 (0 hundreds). The dot on the upper right corner represents the prime number 179 since the upper right corner location corresponds to the 1 in the hundreds heading. The other prime numbers encoded in the cell are 379 and 479 since the location of those dots correspond to 300 and 400 in the hundreds heading. The fact that there is no center dot in this cell means that 279 is not a prime. An empty dot location means that value is not a prime.

Notice that all primes except 2 and 5 end in 1, 3, 7, or 9. The card warns you that primes 2 and 5 are not shown in the grid; instead it just tells you those 2 numbers are primes.

1005	03		2	1 4	5 8		7	6 9	10 13	1	12	11 14	15 18	1	17	16 19	20 23	1	22	21 24
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In the card shown below, the prime numbers from 1 - 100 have been marked:

Hence, the prime numbers from 1 – 100 are 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, and 97. The Orange Prime Number Cards have some versions that have the prime numbers from 1 – 100 highlighted in color and the Math Zone has a PDF that explains one way to memorize these prime numbers.

As a final example, if you had to find a 3 digit prime number that ended in 43, you would look at the 2 highlighted cells shown below and find that 443, 643, and 743 are the only 3 digit primes ending in 43.

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